Ulm University, Germany

29th International Summer School of Epidemiology
7thGerman Collaborative Summer School in Epidemiology
at Ulm University

Institute of Epidemiology
& Medical Biometry
July 23 – 27, 2018

The program is geared to persons with interest in the fields of epidemiology and public health. Professionals, scientists and students working in clinical medicine, epidemiology, public health, social insurance, health policy or health administration are welcome. All courses will be held in English.

Course Outline

Morning sessions (parallel):

1. Epidemiologic Analysis of Binary Data

Christy Avery
UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

2. Introduction to Epidemiology and Causal Inference

Shabbar Ranapurwala
UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

Afternoon sessions (parallel)**:**

3. Applications of Weights in Epidemiologic Analysis

Brian Pence
UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

4. Physical Activity Epidemiology and Public Health

Kelly Evenson
UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

Participants may choose one course from the morning sessions and one course from the afternoon sessions. Participants will receive a certificate after successful completion of a course (compulsory attendance every course day).

Course Descriptions

1. Epidemiologic Analysis of Binary Data
Instructor:
Christy Avery

Structured around the analysis of a cohort study, this course will develop understanding of basic data analytic procedures, with applied examples in SAS. (Access to the SAS-system will be provided in class.) Each day, the instructor will present a lecture orienting students to the day's topics, review and provide support for tailored SAS code, and lead the class in interpretation of results. Topics of instruction include: generalized linear models; analysis of categorical and continuous variables (e.g. estimation and interpretation of disease frequency measures, graphical and tabular examination of dose response, estimation of splines, and tests of linear trend); confounding (e.g. tabular and multivariable models); effect measure modification (e.g. contingency table analyses and interaction contrast ratios); and sensitivity analysis (e.g. evaluation of unmeasured confounders and outcome misclassification). Successful completion of the course should provide students with the skills necessary to analyse (using SAS) and interpret cohort study data.

2. Introduction to Epidemiology and Causal Inference
Instructor:
Shabbar Ranapurwala

This course will help students gain an understanding of basic principles of epidemiology research. This course will also have a special emphasis on the fundamentals of causal inference. This course will cover study design, epidemiologic measures, effect modification, confounding and bias. This will include demonstration of how to develop a directed acyclic graph (DAG) and identify a minimally sufficient set of confounders to control for all observed confounding. All of the course materials will include examples from chronic disease and injury prevention studies, and there will be hands-on exercises and discussions of published literature to gain practical understanding of the discussed concepts.

3. Applications of Weights in Epidemiologic Analysis
Instructor:
Brian Pence

Beginning with intuition derived from how weights are used for multistage survey sampling, this course will introduce the use of weights to address a range of issues in epidemiological analyses, including missing data / attrition, confounding and generalizability. Related topics including missing data mechanisms, propensity scores and multiple imputation will also be discussed. The course will include practical applications and in-class exercises to facilitate mastery of the use of weighting methods to address bias in analysis of observational data. Students should expect to leave with both an understanding of the theory underlying weighting approaches as well as hands-on experience applying these methods.

4. Physical Activity Epidemiology and Public Health
Instructor:
Kelly Evenson

This course will provide a broad introduction to the field of physical activity epidemiology, with learning through lectures, course readings, discussions and in-class exercises. Topics to be addressed include (1) a review of terminology, (2) the development of physical activity guidelines, (3) measurement of physical activity including both self-report and objective assessment, (4) surveillance of physical activity and (5) policy and environmental correlates of physical activity. A discussion of sedentary behaviour will also be integrated throughout the class.

Dates:	July 23 – 27, 2018 Monday – Thursday: 09.00 am – 12.15 pm 01.15 pm – 04.30 pm Friday: 09.00 am – 11.00 am 11.15 am – 01.15 pm Every day there are two coffee breaks, one in the morning and one in the afternoon (Friday: one break).
Location:	Ulm University / Helmholtzstraße 22 / 89081 Ulm
Fees:	€ 575.00 per course (€ 1,150.00 for two courses) € 400.00 per course for members of the German Epidemiological Association (DGEpi) (€ 800.00 for two courses) € 275.00 per course for employees of Ulm University and students (€ 550.00 for two courses) € 10.00 per course material as hardcopy (course materials in electronic form included in course fees)
Fellowships:	A limited number of fellowships is available for participants from low income countries. Deadline for fellowship applications: April 10, 2018
Number of Participants:	Limited to a maximum of 25 participants per course
Application:	Please use the enclosed application form
Deadline:	June 30, 2018
Program Director:	Prof. Dr. med. Dietrich Rothenbacher, MPH
Coordinator at the School of Public Health, University of North Carolina at Chapel Hill:	Prof. Gerardo Heiss, PhD Prof. Wayne Rosamond, PhD
For further information please contact:	Nicole Kroll / Ulm University Institute of Epidemiology & Medical Biometry Helmholtzstraße 22 / D – 89081 Ulm Phone: +49 731 50 31076 / Fax: +49 731 50 31069 Email: nicole.kroll@uni-ulm.de www.uni-ulm.de/med/epidemiologie-biometrie.html

In cooperation with
the UNC Gillings School of Global Public Health
at Chapel Hill, North Carolina, USA
and
the International Graduate School in Molecular Medicine
at Ulm University, Germany
and
the German Society for Epidemiology, Germany.

Application form

International Summer School of Epidemiology at Ulm University
July 23 – 27, 2018

Male: ___ Female: ___ Nationality: _____

Family name, degree: _____

First name: _____

Present occupation: _____

Address: _____

_____

_____

Phone: _____

E-Mail: _____

How did you learn about our courses? _____

Your course material: Electronically: _____ Hard copy (€ 10,00): _____

Status:

- ☐ Regular application
- ☐ Member of the German Epidemiological Association (DGEpi)
- ☐ Employee of Ulm University
- ☐ Student
- ☐ Fellowship Applicant

I would like to register for the following course(s):

Morning, 9:00 am – 12:15 pm (select one course)

- ☐ Course 1: Epidemiologic Analysis of Binary Data
- ☐ Course 2: Introduction to Epidemiology and Causal Inference

Afternoon, 1:15 pm – 4:30 pm (select one course)

- ☐ Course 3: Applications of Weights in Epidemiological Analysis
- ☐ Course 4: Physical Activity Epidemiology and Public Health

_____ _____

Place and Date Signature

Deadline for application: June 30, 2018

Please return to: Nicole Kroll, nicole.kroll@uni-ulm.de
Institute of Epidemiology & Medical Biometry
Ulm University, Helmholtzstraße 22, D – 89081 Ulm